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"SPREAD OF STRIP CROPPING"

Broadcast No. 3 in a series
of discussions of soil con-
servation in the Ohio Valley.

WLW, Cincinnati

May 14, 1938 6 - 6:15 pm

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U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Dayton, Ohio

SOUND: Heavy rain...

MUSIC: Fading...

ANNOUNCER

For centuries, farmers throughout the world have wrestled with the problem of how to cultivate sloping land. The Chinese and Japanese have long grown rice upon the stairstep hillsides that sweep upward from the rivers. The ancient Incas carried on their farming with a fervor that bordered on fanaticism. The permanent bench terraces in the Colca Valley of Peru form one of the most elaborate and lasting systems of agriculture which history records. But in the Ohio Valley contour strip cropping has emerged as one of the most popular and effective methods of tilling sloping agricultural land. Strip cropping in this valley was begun more than 40 years ago in the hilly Tri-State area around Wheeling, West Virginia, and this practice has been modernized to fit either horse-drawn or motor-mechanized farm machinery of today.

MUSIC: Fading...

ANNOUNCER

Strip farming in the United States had a unique beginning. It grew out of necessity, and it appeared, as if by accident, in different parts of the country at the same time. In 1894, a farmer in Marshall county, West Virginia, was studying his fields with his brother...

FARMER

What are we going to do about that field, John? It's beginning to wear out. Guess we'll have to buy more feed for the cattle, or rent some more land. Maybe Harrison will rent part of that east slope.

BROTHER

He might--but are you sure we want it? Harrison was telling me just the other day that he was having trouble with that east slope. The gullies on that slope are getting bigger and bigger.

FARMER

Just like they are on our place. There ought to be some way to stop that washing. We've got to have corn, and we've got to have hay, but every time we plow up that meadow for corn the gullies get bigger and it's hard to stop them.

BROTHER

That's sure the truth. But you've noticed, haven't you, that as long as we've got a good sod on the field, it don't wash any. Looks like we ought to work out...say! Are you thinkin' what I'm thinkin'?

FARMER

You mean...yes...let's go over there!

MUSIC: Fading...

BROTHER

You see? Look there. I started to plow this field the other day, but the rain stopped me. You see what's happened?

FARMER

Well, I'll be....just like you said, the plowed part has washed, but the meadow hasn't washed a bit.

BROTHER

But look! The soil that washed from the plowed field has been caught here by the meadow!

FARMER

By George! Maybe that's the answer. Instead of plowing the whole slope, let's break it up into strips. Put meadow strips in between the strips of corn.

BROTHER

And then next year switch 'em about, so that the corn and meadow strips will change places...

MUSIC: Fading...

ANNOUNCER

Thus did one farmer try out strip cropping. He found that it controlled soil erosion, that it was convenient because it was on the contour of the land, that it enriched his soil by providing a crop rotation. Not long afterward, in the kitchen of a small farm home in the semi-mountainous Tri-State area...

MUSIC: Fading...

SOUND: Clattering of dishes. Woman can be singing.

MOTHER

Sarah, tell your Paw dinner's ready!

SARAH (yelling out door)

Paw! Dinner!

FATHER (shouting from outdoors)

All right! Comin' right in!

SOUND: Moving chairs, low conversation...

FATHER

Mmm.....that food smells good. I'm powerful hungry. Son, how did the plowin' go?

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SON

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Terrible, Paw. I had to plow in some of those deepest gullies, couldn't get across 'em.

FATHER

They won't be so deep in the next field. That grass strip we left when it got too wet last spring kinda seemed to keep the soil from washing.

SON

I know it...say, Paw, why don't we leave a piece of sod across the field I was working this afternoon, too. It might stop the gutters.

MOTHER

That's what I told your Paw yesterday. We've got to do something or all our rich topsoil will be washed away.

FATHER

Well, it might be all right. But Grandpaw never farmed that way. And I don't know what my father would say. But I'm willing to try it if you want to, son. You can leave a strip of grass if you...

MUSIC: Fading...

ANNOUNCER

Some strip cropping began as a convenience, rather than to control erosion. Take the case of Herbert F. Neff, of Belmont county, Ohio. He reports...

NEFF

About 1918 I tried to do some tractor farming, but I found that the short fields were hard to cultivate, with fences at each end, so I had several of the up-and-down hill fences removed, making three or four fields on the contour into one. I noticed immediately that this arrangement reduced erosion, so we rearranged the farm into strips as soon as we could.

MUSIC: Fading...

ANNOUNCER

So...one more farmer chanced on to a system of farming that--with certain improvements--has now been widely adopted. And here's Ewing Jones of the Soil Conservation Service. Ewing, what's the latest news on contour strip cropping.

JONES

The latest, _____, is that farmers cooperating with the Service are strip cropping more than a million acres. You'll notice, I limited the figure to farmers cooperating with the Service...cooperating farmers who are helping us demonstrate strip cropping to others. No one knows how many additional millions of acres have been strip cropped by other farmers--on their own. We only know it is a lot--you see strip cropping everywhere.

ANNOUNCER

Everywhere is a lot of places. I guess you mean everywhere in the Ohio Valley.

JONES

Yes, in the Ohio Valley and in almost every other part of the nation.

ANNOUNCER

As I understand it, strip cropping is a way of farming steep land. You wouldn't need to strip crop on the gently sloping prairie lands of Illinois or the billowy wheat lands of Kansas and Nebraska, would you?

JONES

_____, you have another guess coming there. But, just a second, let's get Gerry Ferris of the Ohio State University into this. I want you--and our listeners--to hear what Gerry has to say. He has just come in from a two thousand mile trip out west. How 'bout it, Gerry? See any strip cropping out there?

FERRIS

Yes, plenty.

JONES

On the so-called "flatlands" or in the hills?

FERRIS

On both, Ewing. Saw some on the gently rolling hills in Missouri and some on flatter land in the plains states. Of course there's more terracing out that way. Terracing works better on smoother land and where the soil is deeper.

JONES

You see, _____, I don't want to get too technical now, but strip cropping is based on a principle--the contour principle--in other words, cultivation across the slope, at right angles--instead of up and down hill.

ANNOUNCER

I see.

JONES

And most of our land, whether in Nebraska or Pennsylvania has a slope--maybe steep, maybe gentle. Especially here in the Ohio Valley, if a slope is steep, it's likely to be short. And if the land has a gentle slope, it's likely to be a long one. In fact, with more area to catch the rainfall, you often have more water running off a long, gentle slope than off a steep one. But either on gentle, or steep slopes--strip cropping will slow down the rate of that run-off.

ANNOUNCER

And if it slowed the water it would reduce erosion. But just how does it put brakes on water?

JONES

In contour strip cropping, farmers plant their row crops, their small grains, and their meadows in bands or strips across the field at right angles to the slope--or, as we say, around the hill.

ANNOUNCER

On the contour!

JONES

Right. Then all the plowing and cultivating is done across the slope so that every furrow, and every shovel mark, becomes a little dam to trap rainfall.

ANNOUNCER

But what if you have real heavy rains--or a cloudburst?

JONES

That's when the strips do their best work. Contour cultivation alone won't hold all the water on a field during a heavy rain. But water that does run down out of a row crop strip has to go into a meadow strip or a strip of close-growing small grain, immediately below. Then you can imagine what happens. Every blade of grass or wheat acts like a dam and holds a few drops of water. The close-growing vegetation spreads out the water. And when you can slow down run-off and keep water from concentrating in large amounts, you can just about prevent erosion. The farmers cooperating with us have seen the value of the practice. Sometimes, of course, they were reluctant to change to contour strip cropping, but once they made the change, many of them came back to say they wanted the job of planning their farms done all over--so as to make the strips narrower.

ANNOUNCER

Because narrower strips catch more soil and water? Isn't that right? Well, you can count on farmers to recognize a good thing when they see it. Tell me, do other farmers outside your demonstration areas take up strip cropping after they see it in operation?

JONES

They sure do. But let Gerry Ferris tell you what has happened so far in Ohio.

FERRIS

Farmers in Ohio are taking to strip cropping, all right. You see, the Soil Conservation Service confines most of its work in the state to demonstration areas. Then it's up to the State Extension Service to carry the soil conservation methods demonstrated out to other farmers in all directions. Well, there was such a demand from farmers for help that we had to make arrangements to aid them in strip cropping, improving their meadows--and all the other soil conservation practices.

ANNOUNCER

That's fine!

FERRIS

We asked the Soil Conservation Service to make a soil conservationist available to us--full-time--to help meet the growing number of requests in Ohio. He's been working for more than a year now--planning demonstration farms in about 20 different counties. We've made up a map showing all the counties where strip cropping has been adopted--and the state makes a good showing. In Jefferson county every township had at least one farm using strip cropping last year.

ANNOUNCER

You spoke of demonstration farms--just what do you mean?

FERRIS

_____, there are something like 255 thousand farmers in the state. But less than 2,000 farms have been planned for complete soil conservation--so we want to scatter the demonstrations out over the state where everyone can see and study them.

JONES

The spread of erosion-control methods has been compared to a rolling snowball, _____; it picks up speed and size as it goes. Everywhere--the farmers who work the land, city people also--because they own farmland, too--are beginning to realize that soil wastage must stop.

And now, let's answer a few questions that have come in through the mail.

ANNOUNCER

Here's one from Guernsey, Ohio. This farmers writes: "The Tuscarawas River is changing its course, destroying valuable farmlands. What can be done about it"? What can, Ewing?

JONES

Well, a farmer can usually control streambank erosion on small streams, but harnessing a river ordinarily will require community cooperation. I'll send this farmer a handbook on streambank protection. That outlines some of the methods we have found to be successful. If he wants still more information, I suggest that he visit the Soil Conservation Service office at Mt. Vernon, and the engineers there will be glad to help him, I'm sure.

ANNOUNCER

And here's a question from Falmouth, Kentucky. "I am interested in a mountain farm in Eastern Kentucky. The owner wishes to use soil conserving methods. At present, because of isolation from markets, little attention is given to farm forests and pasture. Land for corn and other cultivated crops is in great demand. Apparently, no slope is too steep to cultivate, for, as the pioneers, these farmers have too many problems of the present to think much of the future. Is there any answer, other than resettlement?"

JONES

There certainly is, and that's a timely question. I'd like to invite that man to tune in next Saturday, because our broadcast next week will show how farmers in the hill country of Tennessee, under similar conditions, are meeting their problems.

ANNOUNCER

I'll second that invitation.

JONES

Now, just a minute, _____, I forgot one thing.

ANNOUNCER

A bulletin, perhaps?

JONES

That's right. Here's a new bulletin on the topic for the day.

"Strip Cropping for Soil Conservation."

ANNOUNCER

"Strip Cropping for Soil Conservation." It seems to be written in popular language.

JONES

It is. It isn't technical, even if it does contain up-to-date information on the subject. You know where copies may be obtained.

ANNOUNCER

I do. If you have any questions concerning soil conservation, or if you'd like a copy of the bulletin on strip cropping, write to Soil Conservation, Dayton, Ohio.

MUSIC: Fading...

SOUND: Thunder, followed by rain...

ANNOUNCER

This is an educational presentation of the Nation's Station.

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